

TWO LEAF SPOT DISEASES OF ZINNIA

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There are two fungi which attack leaves of *Zinnia elegans* Jacq., producing symptoms so similar that their identity can be established only with the aid of the microscope.

The most common pathogen is *Alternaria zinniae* Pape, a fungus described in 1942 (4). The first published report on the disease in the United States appeared in 1943 (2), but it is probable that it was present in the country since 1924 when leaf spot on zinnia caused by *Alternaria* sp. was collected at Lake Alfred. *A. zinniae* has been found to infect other host plants such as sunflower (3), tomato, lettuce, tobacco, and China aster (1).

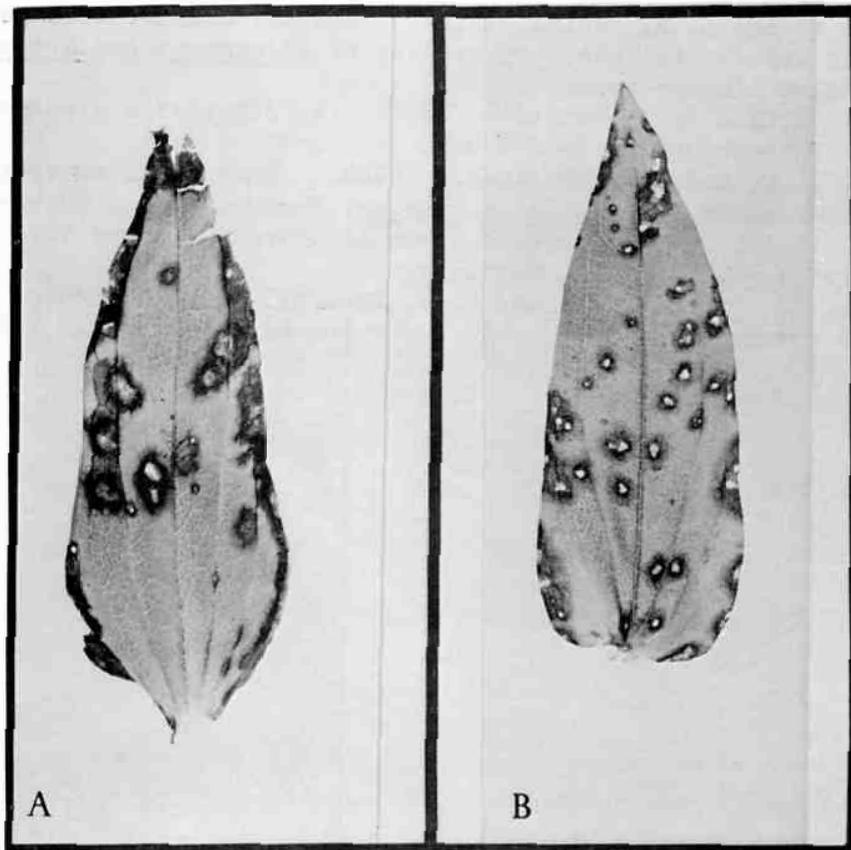


Fig. 1. Leaf spot of zinnia caused by *Alternaria zinniae* (A) and *Cercospora zinniae* (B).

The other fungus which causes leaf spot on zinnia is *Cercospora zinniae* Ellis & Martin (5). It sometimes occurs together with *Alternaria zinniae* on the same leaf. Both fungi are favored by warm weather and high humidity.

SYMPTOMS. As has been stated above, the symptoms are apparently identical: fairly large, reddish brown or dark purple, almost round spots with a light gray or even white necrotic center (Fig. 1). This part often drops out leaving a hole in the center of the spot. Heavily infected leaves turn brown and dry with a tendency to crack and tear in the necrotic tissue. Alternaria zinniae may also infect the stems, petioles and flowers but these symptoms are not as conspicuous as the leaf spots.

CONTROL. Any effective fungicide such as Daconil, maneb, or zineb will control the disease. Sprayings should begin as soon as the first disease symptoms appear and should continue at 1- or 2-week intervals as warm weather and high humidity prevail.

Literature Cited

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